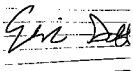# Filing Receipt

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The PUC is at a fork in the road. To solve the reliability problems in Texas and avoid future rolling outages, Governor Abbott and the Texas Legislature tasked the Commission to act decisively. The **ERCOT Innovation Caucus** calls for the PUC to embrace markets rather than central planning, and to incentivize retailers and generators to manage risk on behalf of customers. These comprehensive policies will result in new, dispatchable generation and storage, more controllable loads, easier power plant financing, and a stronger ERCOT. Investment is a risk, and markets let investors manage the risk instead of ratepayers.

1. **Raise ERCOT budget and allow immediate borrowing against future increases in the ERCOT fee.** ERCOT must be a more robust institution to manage the grid. That means more reliability and economic studies, more dispatch and market software (see below), and more employees. Real-time co-optimization is an example of an ERCOT initiative that can rapidly add reliability to the grid.
2. **Accelerated Interconnection.** A more streamlined generator interconnection timeline – so a completed application receives approval within six months – should be achieved soon. Project finance often means getting a generator online by a particular season, and this would make investments more flexible.
3. **Allow Virtual Power Plants (VPPs).** These groups of small batteries, loads, and distributed generation can use software to be dispatchable and provide ancillary services. ERCOT must allow them to qualify for the same services as a generator can provide – including exports. It should be easy for VPPs to grow in size. Microgrids should allow similar flexibility, and nodal pricing should be available to more customers.
4. **Specific pricing curve changes.** Raise minimum contingency level from 2,000 MW to 3,000 MW so prices are no longer caused by a crisis. The VOLL component should not be reduced. A sudden reduction of the VOLL component would create a reliability gap that harms consumers as it reduces outage risk for generators, who may spend less to prepare for major events. Modify the curve so any price adders offer an opportunity for demand or storage to respond, rather than small adders of $10 or less that act as a tax. Adders should improve reliability because they changing behavior.
5. **Use reserves as reserves.** Deploy responsive reserves (RRS) only for frequency, and not for energy dispatch (shorter duration RRS events). Save non-spin to recover RRS. This would save reserves to let the market solve more problems through prices, but still have them available when necessary.
6. **More liquid markets.** ERCOT should implement real-time co-optimization urgently, and also create a voluntary 3-year forward energy and ancillary service market and a 168-hour (7x24) rolling commit/decommit market with 15-minute granularity to replace the DAM, Current Operating Plan (COP), and RUC. A 7x24 market that ran every hour could allow loads or generators to know they'll be needed in 3 hours and plan to respond, or allow a coal plant to have certainty about whether to run overnight at a loss or not. A 3-year market would allow investors to more easily find buyers for new dispatchable technology and allow retailers to continuously hedge new load.
7. **Disclose as much market data as possible as soon as possible.** The recent publication of some outage information is a very good first step. Data disclosure rules shouldn't be designed to protect incumbent generators. Capital intensive investments can be encouraged by allowing investors to have access to as much data as possible. Make it easy for customers to authorize anyone they want to have access to their meter data in real-time without barriers, like expiring authorizations or limitations on reading meters.
8. **Better data models.** Dynamic modeling is essential for a variety of grid studies for interconnections and real-time operations. However, second-by-second modeling is difficult, as ERCOT must combine data from different vendors. ERCOT should create standards for dynamic modeling for the industry.
9. **New Customer Programs.** The PUCT should create two new customer programs in the near term. A price responsive demand (PRD) program at ERCOT or through utility programs would subsidize customers to install equipment or software to respond to price in real time, like downtown buildings, controllable thermostats, or rewiring grocery stores so some load can be easily curtailed. The second program should be a one-time surge in energy efficiency spending for residential weatherization and would require updates to EE goals and rules. Customers could get a rebate check in 2022 from their utility and improve their home's resilience in extreme conditions.
10. **Prepare ERCOT for Faster Recovery.** ERCOT almost blacked out in 2021, and reported it could have taken weeks to get back online. Texas cannot risk a weeks-long outage. Black start should allow recovery in one day, so ERCOT should over-procure, fund onsite fuel storage, batteries at solar farms near loads, or at natural gas compressors, and more. Those investments can be ready to perform for all conditions throughout the year.

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